Transit Planning Board White Paper #3

Existing Regional Service Roll-Up and Initial Peer Comparison

Introduction

While there exists transit across most of the Atlanta region, what exactly is the Atlanta regional transit system? This document provides a short of overview of the infrastructure that supports the Atlanta system and a brief overview of the services that are provided by the infrastructure. A summary of the review of planning documents and the resulting list of projects that will form the basis of the development of regional Transit Plan is provided along with a brief comparison of how the Atlanta region compares with some of our peers in the operation of our regional transit system. The sections in this document represent activities in the TPB Work Program under tasks – 1.2 – Inventory of Existing (Fare) Conditions, 2.2 – Inventory or Existing and Future (Transit System) Conditions, 2.5 – Scenario Development and Evaluation, 4.1 – Establishment of Performance Measures, 5.2 – Existing Service Evaluation.

Existing Services

The fixed route services are divided into four types – heavy rail, express bus, local bus and circulator since these routes have defined routes with (usually) some type of published headways and hours. The regional transit infrastructure currently consists of:

- 38 Heavy Rail Stations
- 49 miles of Rail lines
- 20 Dedicated P&R Lots
- 7 Bus Transfer Centers, some with P&R lots
- 15 Maintenance Facilities throughout the region
- 336 heavy rail cars
- At least 999 Vehicles operating as buses or circulators
- 171 vehicles operating in Paratransit service

As of April 16th, 2007, this infrastructure helped deliver 140 local bus routes within the Atlanta region, nine (9) routes operated by CCT, four (4) routes operated by C-TRAN, five (5) routes operated by GCT, and the rest operated by MARTA.[1] Additionally, as of the same date, there were 36 express bus routes operating within the Atlanta region, nine (9) routes operated by CCT, nine (9) routes operated by GCT, five (5) Blue-Flyer routes operated by MARTA, and the final thirteen (13) operated by GRTA.[2] Circulators were a

[1] Because of their loop nature, MARTA routes 100 and 101 and C-TRAN route 500 were classified as circulator routes.

[2] The 400 series routes operated under contract to CCT and GCT to GRTA are listed as operated by CCT and GCT.

little more difficult to examine than the fixed route local and express buses. Three local routes were classified as circulators primarily because of their loop nature and service of major activity centers – MARTA routes 100 and 101 which are branded as the Downtown and Midtown Tourist Loops respectively, and C-TRAN Route 500 which provides service around the Airport Loop road during the weekdays. An additional thirty (30) other circulators were examined for span of service and headway information including the routes operated by Emory, Georgia Tech, and Georgia State, BATMA, City of Canton and the Atlantic Station Shuttle. This examination yielded some interesting services ranging from activity center distributors, shuttles to MARTA rail stations, to some P&R shuttles reflecting a wide range of uses for circulators to meet the needs of their areas. Finally, as of April 16th, 2007 there were four rail lines operating on the 48-mile, 39-station heavy rail system in Atlanta:

- North Line – Airport to North Springs
- Northeast Line – Airport to Doraville
- East-West Line – H.E. Holmes to Indian Creek
- Proctor Creek Line – Bankhead to Candler Park/Edgewood

There are also two shared segments. The trunk between Airport and Lindbergh Center is shared by the North and Northeast lines and the trunk between Ashby and Candler Park/Edgewood is shared by the East-West and Proctor Creek lines.

To use this system, the five fixed route operators offered 28 different fare products displayed in Table 1 as of April 5, 2007.

Table 1 – Atlanta Regional Fare Products

Fare Product	MARTA	CCT	CCT Express	C-TRAN	GCT	GCT Express	Xpress	Xpress - Reverse Commute
1 Day Pass	$8.00							
10 Trips	$17.50	$11.25	$27.00		$14.00	$27.00		
20 Trips	$30.00	$36.00		$26.00			$45.00	
30-Day Pass	$52.50							
31-Day Pass		$45.00	$70.00	$52.50	$55.00	$100.00	$80.00	$40
40-Ride Pass							$85.00	
7-Day Pass	$13.00							
Children Under 5				$0.00	$0.00			
Children Under 6	$0.00							
Half-Fare 10-ride		$5.40			$8.50			
Half-Fare 65+	$0.85	$0.60		$0.75	$0.85			
Half-Fare out of District	$1.25							
Local to Express Upgrade						$1.25		
Monthly One-way			$55.00					
Paratransit 10-ride		$22.50			$35.00			
Paratransit Monthly		$90.00						
Paratransit One-way		$2.50		$3.00	$3.50			
Round Trip			$4.00				$5.00	$2.50
Single one-way fare	$1.75	$1.25	$3.00	$1.75	$1.75	$3.00	$3.00	$1.50
Student Weekly K-12	$10.00							
U-Pass - Faculty/Staff	$49.50							
U-Pass - Student Monthly	$40.00							
Youth 10-Ride		$7.20						
Youth One-way		$0.80	$1.80	$0.75	$0.85			
Youth Paratransit 10-ride		$14.40						
Youth Paratransit Monthly		$55.00						
Youth Paratransit One way			$1.60					
Youth Round-Trip			$2.55					

As noted in the February Initial Funding Paper, in 2005, these fare products were used by almost ½ million passengers per day to collect over $102 million in revenue for the regional transit system.

Figures 1, 2, and 3 provide a visual display of the routes over the region during the weekday peak period, the weekday mid-day period, and on Sundays.

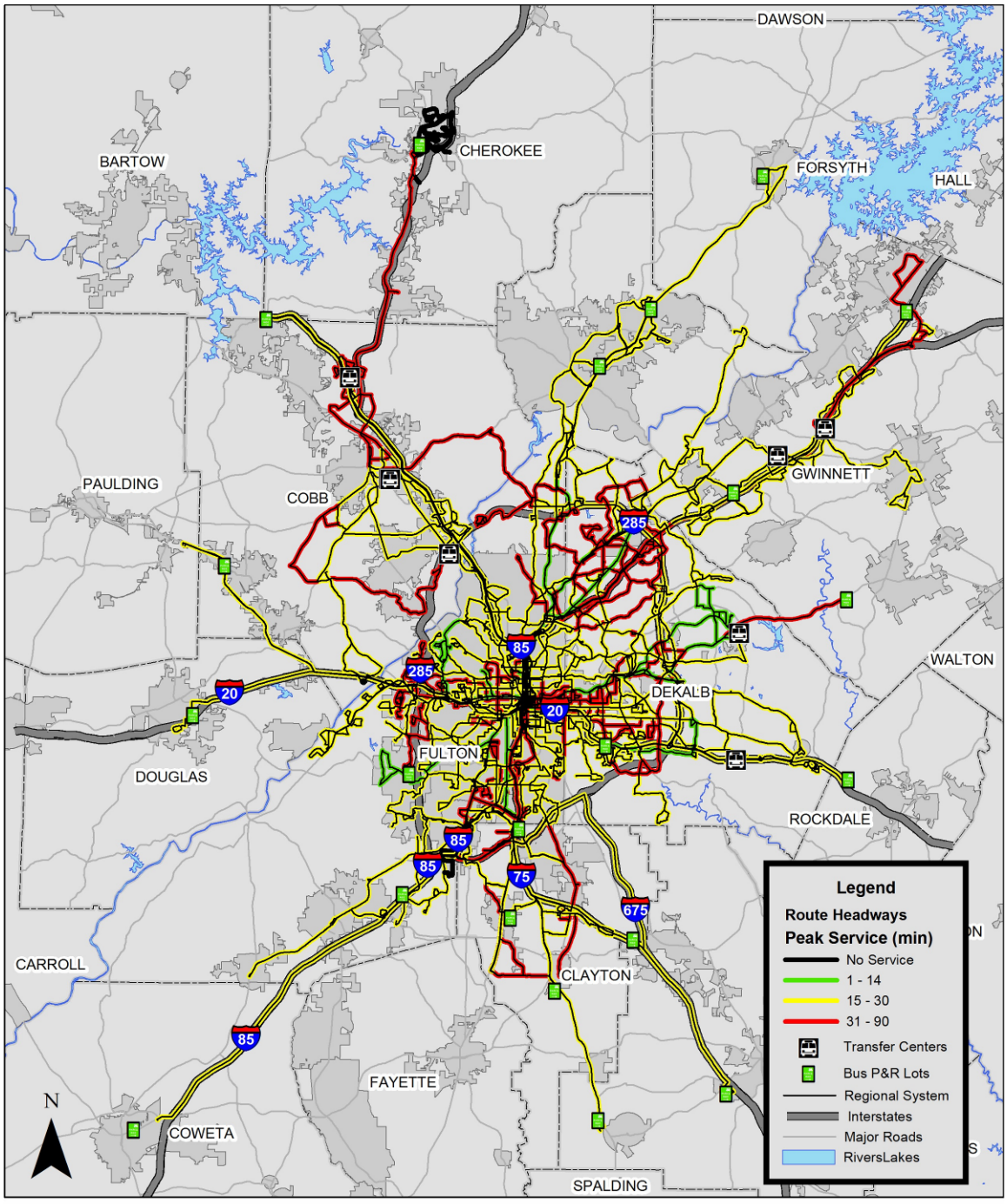

Figure 1 - Peak Weekday Transit System

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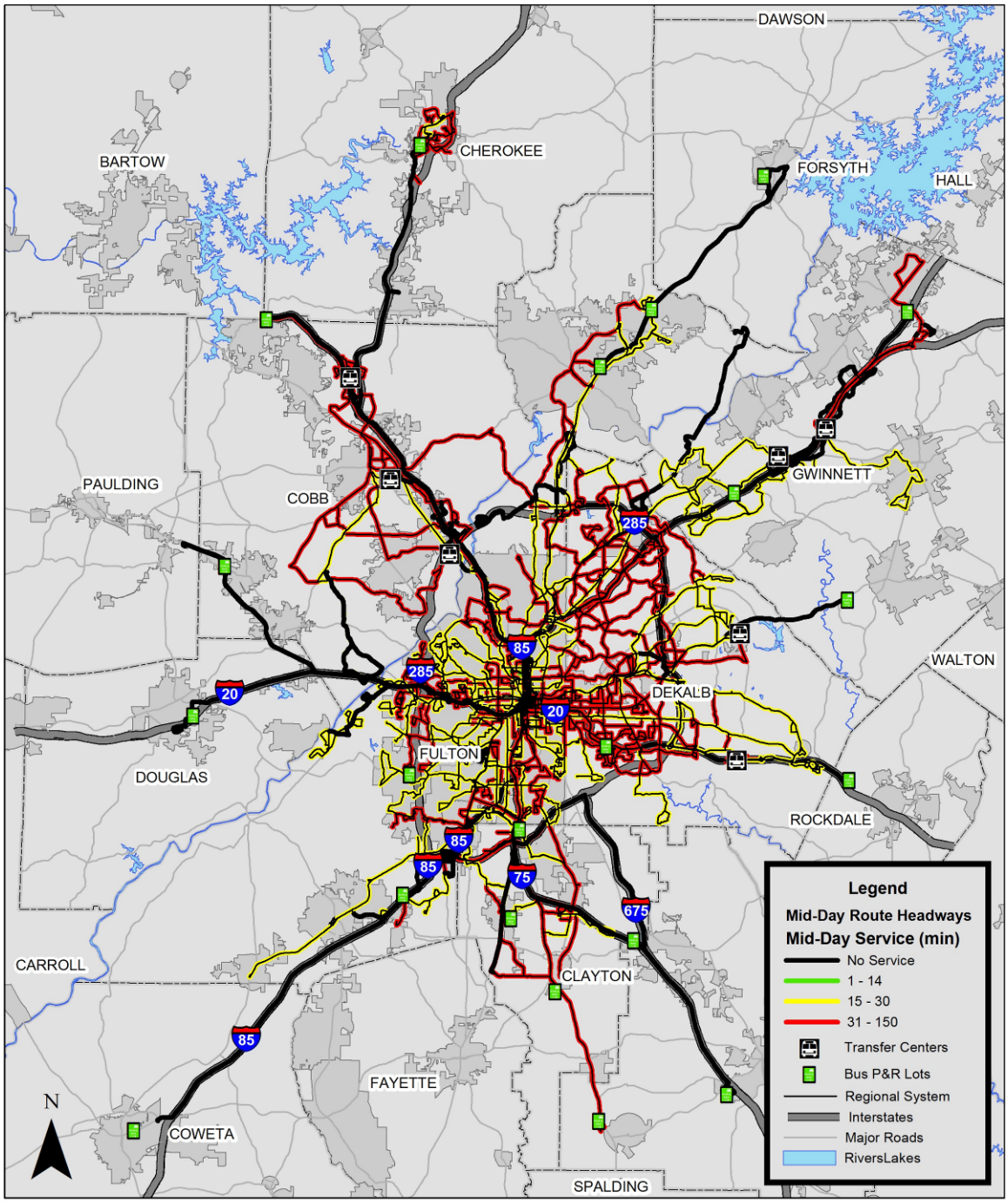

Figure 2 - Mid-Day Weekday Transit System

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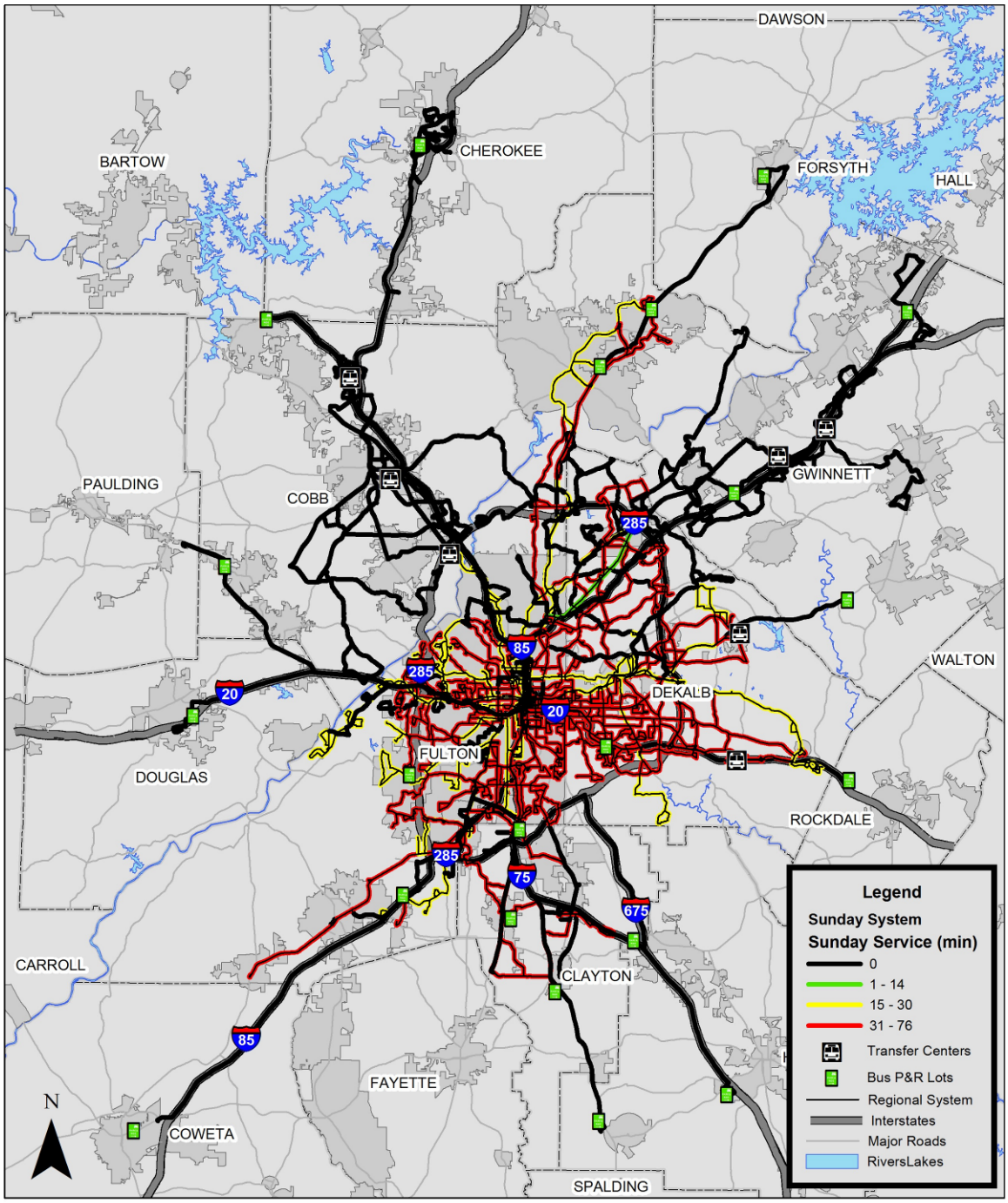

Figure 3 - Sunday Transit System

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As noted in a previous document provided to the Board in February, 2007, the Atlanta region spent $338 million in 2005 to provide the regional system. What this money buys is a system that moves approximately ½ million people a day, provides decent peak hour coverage of the entire region with a network of 140 local bus routes, 33 express routes, 4 regional rail routes, and a network of activity center circulators supported by an

infrastructure of a 49-mile rail system, 20 P&R lots, 7 Transfer Centers, 336 rail cars, and over 1100 buses and paratransit vehicles maintained at one of 15 maintenance facilities. As Figures 1, 2 and 3 illustrate, outside of the peak hour, bus service across the region drops to, at most, 1 or 2 buses an hour in six counties with even the two-county rail system only providing four trips an hour on the branches. On Sundays, bus service is limited to three counties with service primarily at one bus an hour.

In other words the region has built a capital system to provide a decent peak-hour region transit network but provides infrequent mid-day and Saturday service and a limited Sunday network.

Comparison with peers

A natural question to ask after examining our existing system is to examine several peer regions from around the United States. To this end, an brief examination of how our existing system is performing in terms if financing and performance and additionally is part of the Work Order Tasks 1.1 – Analysis of Peer Regions, 4.1 – Establishment of Performance Measures, and 5.2 – Existing Service Evaluation. The peers used were the peers identified in the Regional Transit Institutional Analysis – Chicago, Detroit, Minneapolis, San Diego, San Francisco, Seattle, and Washington, D.C. – along with five additional demographic peers – Dallas/Ft. Worth, Denver, Houston, Miami, and Phoenix. These cities all are with 2 million of Atlanta's population, experienced a population increase of more than 500,000 people between 1990 and 2000, and had a growth rate of over 15% between 1990 and 2000. Additionally, Boston, Portland, Los Angeles, and New York were also included since these cities are also frequently cited as examples or comparisons.

Figure 4 shows the average number of transit trips someone in each region took if they had transit available. Figure 5 shows the average cost per trip by operational costs and by total costs (operational costs plus capital costs) regions. Figure 6 shows the operational farebox recovery ration and the total farebox recovery ration for these regions.

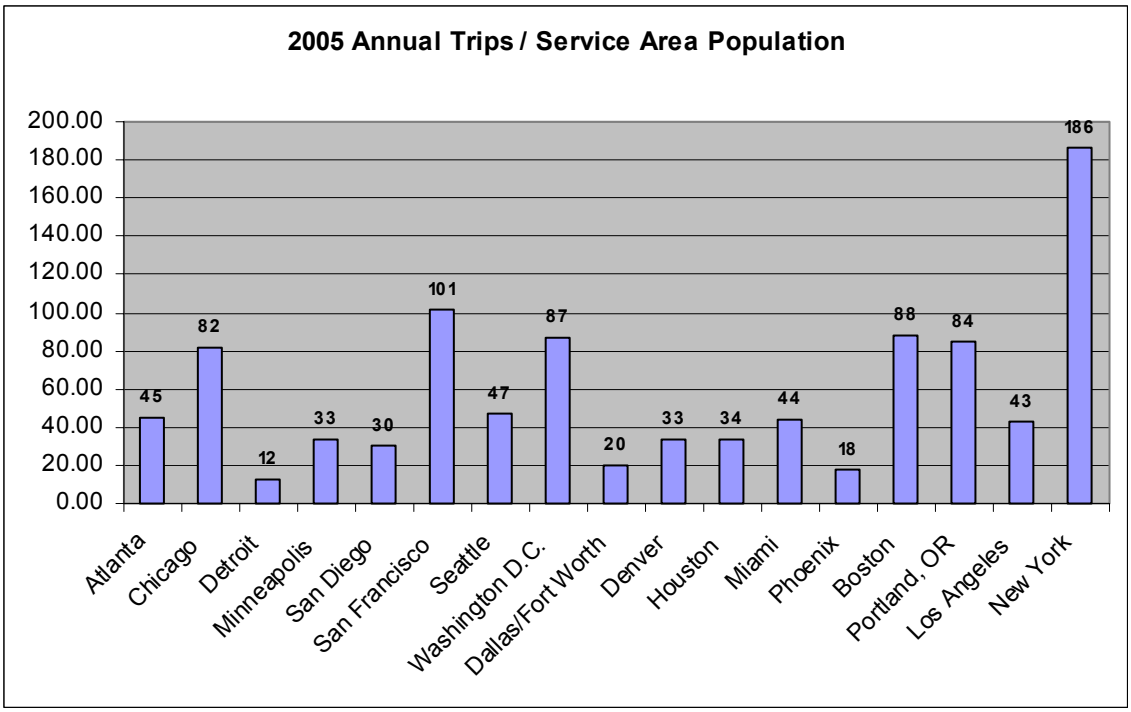

Figure 4 – 2005 Average number of Transit Trips / Service Area Population

Figure 4 shows that places recognized for strong transit systems – Chicago, San Francisco, Washington – do use transit more than the average Atlantan, the average Atlantan does use transit more than their counterpart in our Sunbelt peers such as Dallas, Denver, Houston, Phoenix, and San Diego. In other words, even with the limited regional transit system described in previous sections, where transit is provided in Atlanta, the population does use the system.

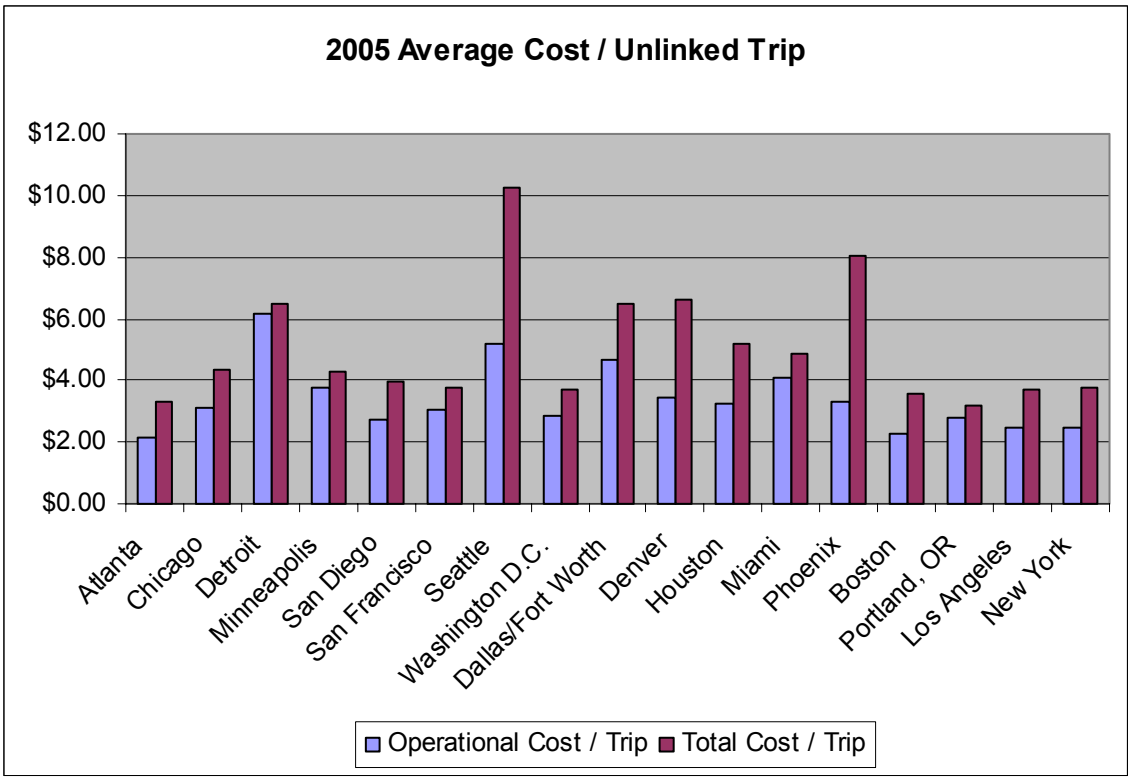

Figure 5 – Average Operational and Total Costs per Transit Trip

Figure 5 shows that, on average for any type of transit trip, Atlanta has one of the lowest costs per trips among these peer cities regardless of whether it is just operational cost per trip or the total cost of the trip. Notice too that those regions with an operational cost below $6.00 per trip, but a total cost per trip above $6.00 per trip, are those regions investing in their transit systems and are also some of the Atlanta region's recognized competitors – Seattle, Dallas, Denver, and Phoenix. There are two points to be made here. First, on a regional basis, the Atlanta region's transit operators are providing service at one of the most efficient levels in the country on a per/trip basis. Second, several of our major competitor regions are investing heavily in their transit systems.

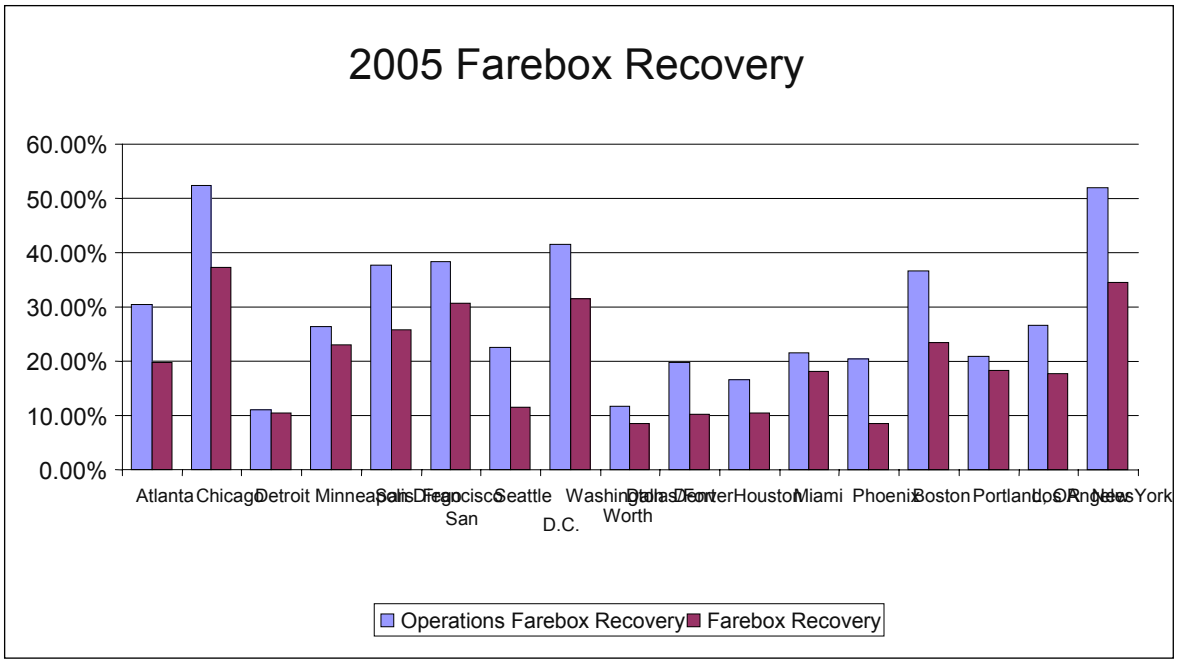

Figure 6 – Operational and Total Regional Farebox Recovery

Figure 6 raises the interesting point that in terms of operational recovery, on a regional basis, the Atlanta region's transit system recovers over 30% of its operational costs through fares. The regions that perform better are those that have mature systems such as New York, Boston, and Chicago, ore the newer systems such as Washington and San Diego that have a much more robust regional transit network than the Atlanta region. The Atlanta region compares favorably against its competitor regions. Again two points can be made here. First, the only regions higher farebox recovery ratios than the Atlanta regions generally are accepted to have fully regional fixed-guideway transit systems. Second, in comparison with regions without fully regional fixed-guideway transit systems, the Atlanta region has a much higher farebox recovery ratio meaning that the regional operators are performing well above average in the delivery of the limited service they are providing.

Proposed Projects

Atlanta region is also no stranger to the development of transit plans. In reviewing available planning documents since 1972 when MARTA bought the Atlanta Transit System, TPB staff have developed a list of projects that includes:

- 7 commuter rail lines
- 4 exclusive non-road ROW fixed Guideway lines
- 10 High-Capacity Transit Lines along Freeway ROWs
- 30 Medium Capacity Transit lines along Arterial Roads
- 3 Extensions off the MARTA West Line
- 2 Extensions off the MARTA South line
- 3 variations of a MARTA Heavy Rail Extension to Clayton County
- 7 additional MARTA Heavy Rail Extensions

- 2 proposed MARTA maintenance facility projects
- 6 proposed improvements to MARTA's current station entrances
- 4 proposed MARTA infill stations
- 31 Park and Ride Lots
- 15 Transit Centers
- 5 small scale bus lanes
- 3 in-town regional express bus support facilities
- 1 regional maintenance facility
- 12 major activity center circulators
- 44 local bus routes
- 13 express bus routes

This list of projects includes just those projects that were recommended by official planning proposals. This list of projects was provided to each member of the board in February as well along with a map and list of projects of each board member's area of representation. This list provides the basis from which the development of the regional transit plan will be developed. The shear number of recommended yet unimplemented projects shows that, in addition to a challenge operating challenge illustrated by having a capital investment capable of supporting a regional transit network, but only operating that network during peak hours with infrequent service at other times, the region also faces a strong challenge of implementation of identified needs. It should also be stressed that some of the identified projects are moving forward to implementation with several of the identified Park and Ride lots under active design and construction.

Conclusions

Overall, the information presented here suggests that the Atlanta region has the capital resources to provide a reasonable regional transit system and does so during the peak hour. However, as a result of operating funding challenges, the region can only provide infrequent service outside of the peak hour. In other words, Atlanta has the skeleton of a regional transit system, but with limited flesh on its bones.

Additionally, the Atlanta region also has identified a significant number of transit capital needs. However, this identification of transit needs has been followed by implementation in only a few circumstances suggesting a significant challenge of implementation authority.

Finally, a comparison of the Atlanta region against a large sample of its U.S. peers revealed that:

- People in Atlanta do use transit when it is provided
- Regional Operators in Atlanta are providing service at a low cost/trip across the board
- Regionally, Atlanta recovers more of its costs through fares than other regions without a fully regional fixed guideway transit network